**IT Applications Unit 3, AOS 1, Online Communities**

1. Complete the following, from pgs, 18-28: **Network hardware and software**

**Networks are classified according to below and we will study the following:**

1. **Network Categories: LAN, WAN**
2. **Network Architecture, client-server; peer-to-peer; internet peer-to-peer; intranet**
3. **Network communication standards**
4. **Network hardware and software**
5. **Transmission media**
6. **Network security**

**Network hardware and software**

**Network Operating systems**

1. Describe the role of the network operating system.

controlling traffic on the network

1. What are the typical tasks of network server software?

controls file access, tracks users, authenticates access to network servers, maintains log of usage and problems

1. What is the role of network client software?

establishes connection through NIC

1. List the 3 providers of network operating systems.

**Web client software**

1. List the typical client software

Web browser, Electronic mail, Videoconferencing, Instant messaging, Chat room

**Software for setting up websites**

1. Describe the role of http protocol.

transmitting & receiving information on the internet.

1. What is the role of web server software?

This provides content in form of html documents, images, etc.

1. What is the role of a proxy server?

acts as an intermediary for requests from clients seeking resources from other servers.

* 1. What are the advantages of using a proxy server?

speed up access to resources

1. Describe the role of the following software:
   1. SMTP

used on electronic mail servers to handle the sending and receiving of client emails.

* 1. POP3

used to store messages.

* 1. FTP

enables the uploading and downloading of files between computers and the internet.

* 1. Web software applications

programs designed for use on a website.

**Cross-platform web software**

1. What is meant by a Cross-platform application? List egs.

Flash, java

1. What is adobe flash?

a multimedia and software platform used for creating vector graphics, animation, games and rich Internet applications

**Network Hardware**

Describe the characteristics and role of the following network hardware devices:

1 Network interface card

allows a stand-alone computer to connect to a network.

2 Wireless access point

WAP connects wireless communication devices to a wired or wireless network

3 Switches

store the address of every device and are capable of inspecting packets as they are received

4 Routers

Security device that guards the connection between a LAN and the outside world

5 modems

a device to transmit data over telephone or cable lines.

For each of the following modem types, in a table indicate the following:

Modem download speed

i) dial up modem

ii) digital modems:

* + 1. DSL
    2. ADSL & ADSL 2 +

iii) cable modems

6 How does a digital modem differ from a dial-up modem?